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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,513	10/03/2003	Werner Juengling	MI22-2391	1971
21567	7590	11/10/2005	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			KEBEDE, BROOK	
			ART UNIT	PAPER NUMBER
			2823	

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/678,513	Applicant(s) JUENGLING, WERNER	
	Examiner Brook Kebede	Art Unit 2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-47 and 51-55 is/are allowed.
- 6) ☒ Claim(s) 48-50 and 56-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/14/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 58 and 62 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 58 recites the limitation "The method of claim 48, wherein the encapsulation material comprises nitride material" in lines 1-2. However, as claimed in claim 48 and depicted in Fig. 1-3, the silicon nitride material is layer 34 the silicon oxide material formed over the silicon nitride (nitride) material is layer 40 and the encapsulating material that is formed over the silicon oxide material 40 is layer 42 which is the resist material. Therefore, the material 42 being a resist material which used as encapsulation layer is not a silicon nitride material as claimed in claim 58. Hence, there is no support in specification for encapsulating layer 42 being a silicon nitride material as originally filed.

Therefore, the claim contains the subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 62 recites the limitation "The method of claim 50, wherein the encapsulation material comprises nitride material" in lines 1-2. However, as claimed in claim 48 and depicted in Fig. 1-3, the silicon nitride (nitride) material is layer 34 the silicon oxide material formed over the silicon nitride material is layer 40 and the encapsulating material that is formed over the

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silicon oxide material 40 is layer 42 which is the resist material. Therefore, the material 42 being a resist material which used as encapsulation layer is not a silicon nitride material as claimed in claim 58. Hence, there is no support in specification for encapsulating layer 42 being a silicon nitride material as originally filed.

Therefore, the claim contains the subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 48-50 and are rejected under 35 U.S.C. 102(b) as being anticipated by Dennison (US/5,637,525).

Re claims 48 and 58, Dennison discloses a semiconductor processing method comprising: forming a conductive line (18) (i.e., a gate line) over a substrate (12), the conductive line (18) having a conductive portion (19 20) (see Fig. 1) and silicon nitride material (23) over the conductive portion (19 20), and silicon oxide material (30) over the silicon nitride material forming encapsulation material over the conductive line (18); and in a common masking step, etching a doping window opening (36 37) over a substrate (12) active area adjacent the conductive line and removing at least some of the encapsulation material over the conductive

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line and some of the silicon nitride material (23) over the conductive portion (19 20) of the conductive line (18) to form contact opening (38) to the conductive line (18) (see Figs. 1-8).

Re claim 49, as applied to claim 48 above, Dennison discloses all the claimed limitations including gas diffusion doing though the doping window opening into the substrate (see Figs. 1-8).

Re claims 50 and 62, Dennison discloses a semiconductor processing method comprising: forming a conductive word line (18) over a substrate (12); forming a silicon nitride layer (23) over the word line; forming a silicon oxide layer (30) over the silicon nitride layer; forming encapsulation material (32) over the silicon oxide layer (30), the silicon nitride layer (23) and the conductive word-line (18); the encapsulation material forming sidewall spacers (22) over the conductive word-line (18) selectively removing at least some of the encapsulation material relative to the silicon oxide layer; and selectively removing at least some of the silicon oxide layer relative to the layer wherein the selectively removing forms at least part of a silicon nitride contact opening over the word line (see Figs. 1-8).

Re claim 56, as applied to claim 48 above, Dennison discloses all the claimed limitations including wherein the etching of the doping window opening comprises forming a pair of doping window openings (33 34) adjacent opposite sides of the conductive line (see Fig. 4).

Re claim 57, as applied to claim 48 above, Dennison discloses all the claimed limitations including wherein the etching comprises exposing the conductive portion of the conductive line (see Fig. 8).

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Re claim 59, as applied to claim 48 above, Dennison discloses all the claimed limitations including wherein the encapsulation material comprises material other than oxide material (see Figs. 1-8).

Re claim 60, as applied to claim 48 above, Dennison discloses all the claimed limitations including wherein the forming of the encapsulation material comprises forming after the forming of the conductive line (see Figs. 1-8).

Re claim 61, as applied to claim 48 above, Dennison discloses all the claimed limitations including wherein the encapsulation material and the silicon oxide material comprise different materials (see Figs. 1-8).

Re claim 63, as applied to claim 50 above, Dennison discloses all the claimed limitations including wherein the forming of the encapsulation material comprises forming a substantial portion of the encapsulation material elevationally below the silicon oxide layer (see Figs. 1-8).

Allowable Subject Matter

4. Claims 40-47 and 51-55 allowed over prior art of record.

Response to Arguments

5. Applicant's arguments filed on August 22, 2005 have been fully considered but they are not persuasive.

Applicant argues that "the Examiner improperly relies on Dennis's teaching to one material, insulating layer 30 to allegedly teach both positively recited materials ... a single material may not be fairly interpreted to disclose the material formed by two different steps..."

In response to applicant's argument, it is respectfully submitted that Dennis '525 discloses all the claimed limitations as applied above. The instant application claimed invention

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is does not distinctively claim the actual position of each material the steps and orders how each materials formed.

Claims are given their broadest reasonable interpretation in light of the supporting disclosure. See *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. See *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

Therefore, the rejection under 35 U.S.C. 102 is deemed proper.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


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Correspondence

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brook Kebede
Primary Examiner
Art Unit 2823

BK
November 8, 2005